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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,316	07/13/2001	Sze Cheng Yang	5065	6176

7590 06/20/2003

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Boston, MA 02110

EXAMINER

TRUONG, DUC

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 06/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/905,316

Applicant(s)

YANG, SZE CHENG

Examiner

Duc Truong

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/9/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

**Note that the claims have been amended to include the claimed characteristics such as crosslinked and the composition resisting swelling when exposed to an aqueous medium. Therefore, the last Office action is hereby replaced by a new ground of rejection, as stated below:**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Liu et al of record on 1449 or WO 9703127.

Liu discloses a template guided chemical polymerization was used to obtain a polymeric complex that contained a strand of a conductive polymer and a strand of a polyelectrolyte. The reaction product is a non-covalently bonded molecular complex between a conducting polymer and a polyelectrolyte (see col. 3, lines 39-48).

Note that the conducting polymer comprising polyaniline, polypyrrole, polythiophene, polyacetylene (see col. 3, lines 35-38).

Art Unit: 1711

Note also that the polyelectrolytes comprising poly(butadiene-maleic acid) or its salt form, poly(methacrylic acid) and copolymers thereof---(see col. 3, lines 26-33)

WO 9703127 discloses a coating comprises a polymeric complex composed of two or more strands wherein one strand is a conductive polymer such as polyaniline and the other strand is an ionic functional group containing copolymer such as carboxylate functional polyacrylate (see Abstract).

Note that the conductive polymer comprising polyaniline, polypyrrole, polythiophene, polyacetylene (see page 7, lines 29-33).

Note also that the polyelectrolyte is selected from polymers with anionic functional group comprising poly(butadiene-maleic acid) or its alt form, poly(methacrylic acid) and complexes thereof---(see page 7, lines 20-28).

The disclosure of the references differ from the instant claims in that they do not disclose the characteristics in that the reactive functional group of said conductive polymer facilitates the crosslinkage between the polymeric complexes when the complexes are heated and the composition resisting swelling when exposed to an aqueous medium.

Applicant has presented no factual evidence to show why the products of the references would not in fact have the claimed properties. The fact that the references do not disclose said properties is not viewed as a basic to infer that the properties are nor possessed by the products of the references. The composition disclosed by the references is prepared from reactants and under process conditions that are inclusive of the claimed reactants and conditions.

In view of this similarity, it would appear to be inherent that a product having the claimed crosslinked and resisting swelling when exposed to an aqueous medium, could be prepared following the teachings of the references. See *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

The following position is taken because the claims in this application are read as broadly as possible. Limitations from the specification or Remarks as to how the conductive composition is produced are not read into the claims. The claims as presented are included in the broad teachings of the references since they read on a polymeric complex comprising a strand of a  $\pi$ -conjugated polymer and a strand of a polyelectrolyte, produced from any methods, having the claimed characteristics.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Art Unit: 1711

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 703-308-2437.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9791 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



DT  
June 19, 2003

DUCTRUONG  
PRIMARY EXAMINER